

**ACTUARIAL VALUATION OF THE
EMPLOYEES' RETIREMENT SYSTEM
OF THE
STATE OF RHODE ISLAND**

AS OF JUNE 30, 1993

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SECTION I - SUMMARY OF VALUATION RESULTS

Contribution Requirements

Retirement Income

The contribution requirements for fiscal 1996 for the State Employees' Retirement Plan and the Teachers' Retirement Plan are set out below. For comparison the contribution requirements for the previous two fiscal years are also shown.

	<u>Fiscal 1996</u>	<u>Fiscal 1995</u>	<u>Fiscal 1994</u>
State Employees Plan:			
Normal Cost	12.21%	12.72%	12.72%
Unfunded Liability Cost	<u>5.99%</u>	<u>6.35%</u>	<u>6.35%</u>
Total Cost	18.20%	19.07%	19.07%
Less Employee Contribution	<u>7.75%</u>	<u>7.75%</u>	<u>7.75%</u>
Employer Cost*	10.45%	11.32%	11.32%
Teachers Plan:			
Normal Cost	14.78%	14.77%	14.77%
Unfunded Liability Cost	<u>9.43%</u>	<u>9.75%</u>	<u>9.75%</u>
Total Cost	24.21%	24.52%	24.52%
Less Employee Contribution	<u>8.50%</u>	<u>8.50%</u>	<u>8.50%</u>
Employer Cost	15.71%	16.02%	16.02%
	14.71		

In 1993 the Retirement Board elected to compute future fiscal year costs one extra year in advance to assist the fiscal budget process. Therefore Employer costs for fiscal 1995 and 1994 are the same since the computation of the cost for both fiscal years was based on valuation results and data as of June 30, 1992. The employer cost for fiscal 1996 is based on the valuation results and data as of June 30, 1993.

For fiscal 1996, the Teachers' Plan rate is to be paid 40% by the State and 60% by the cities and towns. The overall rate of ^{14.71}15.71% includes the cost of prior fiscal year State contribution deferrals. The deferral represents 0.56% of the rate and is payable by the State, the cities and towns share is therefore 60% of 15.15% or 9.09% and the State will contribute the balance of the 15.71% or 6.62%.

6.62%

8.49%

see revised rate

SECTION I - Summary of Valuation Results (cont'd)

Postretirement Health Insurance

Certain retired State employees are eligible for postretirement medical benefits under the provisions of the Retirement System. A separate valuation of these benefits has been reported to the Retirement Board. The State must fund, as a minimum, the pay-as-you-go cost of insurance premiums in excess of the retiree cost sharing. Based on medical and payroll data supplied by the Department of Administration, we have estimated this cost as \$2,530,000 for fiscal 1995 (0.57% of payroll for State employees) and \$2,930,000 for fiscal 1996 (0.64% of payroll). The federal government is considering changes to the health care system and any projection of cost, which is dependent on assumed increases in health care cost, is quite difficult. In order to state with some degree of confidence that sufficient funds will be appropriated, we recommend that our assumed costs be increased by an additional 10%. Thus, our recommended State appropriation for postretirement medical benefits is as follows:

	<u>Fiscal 1996</u>	<u>Fiscal 1995</u>
Postretirement Medical Benefits:		
▶ Appropriation required by Legislation	0.25%	0.25%
▶ Additional Appropriation to meet current cost	<u>0.45%</u>	<u>0.38%</u>
▶ Total Appropriation as a % of payroll	0.70%	0.63%
▶ Total Appropriation	\$3,225,000	\$2,785,000

Total Appropriation

The total appropriation (as a percentage of payroll) by the State of Rhode Island to the Retirement System with regard to State employees is the sum of the appropriation for retirement income benefits and for postretirement health insurance benefits, as follows:

	<u>Fiscal 1996</u>	<u>Fiscal 1995</u>
State Employees		
‣ Retirement	10.45%	11.32%
‣ Postretirement Health	<u>0.70%</u>	<u>0.63%</u>
Total Appropriation	11.15%	11.95%

Towns which did not Participate in the 1990 Early Retirement Incentive Program

There were a number of towns which did not participate in the 1990 early retirement incentive program. These were:

Code Number:	2003	Burillville
	2009	East Greenwich
	2018	Little Compton
	2025	North Smithfield

As a result the contribution requirement for these towns is reduced by the cost of the early retirement incentive program. The overall contribution requirement for fiscal 1996 of the group is 14.01% (i.e., 15.71% minus the cost of the 1990 early retirement incentive program of 1.70%) and as above the State will meet the full cost of prior fiscal year deferrals of 0.56%. The contribution for these towns is therefore 8.07% and the State contributes the balance of 5.94%.

Plan Experience

The participant data submitted by the Retirement Board as of June 30, 1993 contained fewer unknown data items than in prior years. Therefore, less information had to be estimated. This reflects the efforts of the Board's staff to improve the quality of data.

The employer costs for fiscal 1996 have decreased from the costs for fiscal 1995 due to a number of factors:

State Employees

- ▶ Average pay increased by 5.9% for State Employees employed continuously throughout the entire year versus the assumed rate of 4.5%. This caused costs to increase by approximately 0.3%.
- ▶ The actuarial value of assets (utilized to calculate the employer contribution) returned 11% for the year compared with an expected return of 8% - this leads to a reduction in the employer cost for State Employees of approximately 0.9%.
- ▶ Changes to the participant group, such as pensioner mortality, staff turnover and retirements, caused the employer cost to decrease by approximately 0.3%.
- ▶ In conclusion, the net effect of the plan experience caused the employer cost to decrease by approximately 0.9% from 11.32% to 10.45%.

Teachers

- ▶ Average pay increased by 6.0% for Teachers employed continuously throughout the entire year, versus the assumed rate of 4.5%. This factor leads to an increase in cost of approximately 0.4%.
- ▶ The actuarial value of assets returned 11% for the year compared with an expected return of 8% - this leads to a reduction in the employer cost for Teachers of approximately 0.9%.
- ▶ Changes to the participant group, especially due to fewer Teachers leaving service than expected, caused the employer cost to increase by approximately 0.2%.
- ▶ In conclusion, the net effect of the plan experience for Teachers caused the employer cost to decrease by approximately 0.3% from 16.02% to 15.71%.

SECTION I - Summary of Valuation Results (cont'd)

When assessing the relative impact of the above factors it is appropriate to compare year to year changes in the total cost of benefits including employee contributions. When looked at in this manner, the change from year to year is a smaller proportion of the total cost than the change in the employer cost net of employee contributions. Due to the fact that employee contributions are a constant percentage of payroll, any gains or losses are passed on to the employer's share of the cost.

Funded Status of the System

There are several measures commonly used to describe the funded status of the plan. The following tables summarize two measures which are described below.

Projected Benefits/Actuarial Asset Value

The ratio of assets to the projected benefit liability (under the Entry-Age Funding Method) compares the actuarial value of assets to the value of accrued benefits with projected salary increases to retirement.

The projected benefit ratio increased between 1992 and 1993. This is mainly due to the favorable asset return.

	<u>Ratio of Assets to Liabilities</u>		
	<u>June 30, 1993</u>	<u>June 30, 1992</u>	<u>June 30, 1991</u>
State Employees	64.38%	62.42%	62.56%
Teachers	58.73%	56.63%	56.66%

SECTION I - Summary of Valuation Results (cont'd)

Vested Benefits/Market Value of Assets

The ratio of assets to the vested benefit liability compares the value of vested benefits to the market value of assets. Vested benefits are:

- Participants with more than 10 years of service and pensioners - value of accrued benefit but not less than the value of accumulated employee contributions.
- Participants with less than 10 years of service - value of accumulated employee contributions.

The vested benefit ratio has improved since the last year. For this ratio, salaries are not projected and liabilities are compared to the market value of assets. The improvement in the ratio reflects the favorable asset return, The market value of assets returned 11.1% compared with an assumed return of 8%.

	<u>Ratio of Assets to Liabilities</u>		
	<u>June 30, 1993</u>	<u>June 30, 1992</u>	<u>June 30, 1991</u>
State Employees	83.55%	80.67%	77.54%
Teachers	79.32%	77.46%	75.47%

The Early Retirement Incentive Program of 1989

The incentive program allowed participants with 25 or more years of service (or if over age 60, 10 or more years of service) to retire and receive a 10% enhancement in their benefit service. The program was only available to state employees and approximately 750 state employees took the incentive offered. The cost of the incentive is spread over 30 years, as a dollar amount which will increase in proportion with expected payroll, (see Appendix II for a description of the funding method) commencing in fiscal year 1992. The cost of the program is 0.62% of payroll.

SECTION I - Summary of Valuation (cont'd)

The Early Retirement Incentive Program of 1990

Unlike the 1989 program, the 1990 program was available to both state employees and teachers. Participants with 23 or more years of service could retire and receive a 10% enhancement in their benefit service. In addition, the benefit was based on the final year's salary (rather than a three year average). Approximately 500 state employees and 800 teachers took the 1990 incentive program.

For the State Employees' Plan, the cost of the incentive is spread over 30 years, as a dollar amount which will increase in proportion with expected payroll, commencing in the fiscal year 1993. The cost for the State Employees' Plan is 0.60% of payroll.

For the Teachers' Plan, the cost is spread over a 24 year period (see Exhibit III for a description of the funding method) commencing in the fiscal year 1993 and is equal to 1.70% of payroll.

Assets of the Retirement System

Section III describes the assets of the retirement system, analyzes the cash flow during the previous fiscal year and shows the proportion of funds invested in each of the major investment categories.

SECTION I - Summary of Valuation (cont'd)

The table below provides a plan year summary of certain key statistics of the performance and transactions of the retirement fund:

	<u>7/1/92 to 6/30/93</u>	<u>7/1/91 to 6/30/92</u>	<u>7/1/90 to 6/30/91</u>
Time-weighted return on market value of assets⁽¹⁾	11.1%	13.5%	7.5%
Market Value of Assets at end of period	\$2,811,948,000	\$ 2,569,300,000	\$2,316,700,000
Actuarial Value of Assets at end of period	\$2,726,034,000	\$ 2,483,700,000	\$2,316,700,000
Total Contribution	\$ 183,973,000	\$ 138,000,000	\$ 149,700,000
Total Benefit Payments	\$ 203,925,000	\$ 196,700,000	\$ 203,600,000

⁽¹⁾ As prepared by Wilshire Associates

The return achieved by the fund should be compared with the assumed return of 8%.

The actuarial value of assets recognizes one-third of the investment gain in excess of the assumed return of 8% and also a one-third portion of previous gains as yet unrecognized. As a result the actuarial value of assets of the fund returned approximately 11% during fiscal 1993. The remaining two-thirds of the current year's excess investment gain will be recognized in future valuations. Spreading investment gains and losses over a three year period helps to reduce volatility in the plan's contribution requirements.

SECTION I - Summary of Valuation (cont'd)

The contribution income was still less than the benefit outgo during fiscal 1993. However, the shortfall of contribution income against benefit outgo of \$20 million was less than in previous years (when the State deferred a part of the contribution requirement). The income from investments exceeded the net outgo, see Table 4, and therefore monies were available for reinvestment.

Actuarial Method and Assumptions

Exhibit III describes the actuarial method adopted to calculate the contribution requirement and also the assumptions utilized in the calculation. There were no changes in the method and assumptions as of June 30, 1993 utilized to determine plan costs.

Plan Benefit Structure

The plan benefit structure is described in detail in Exhibit IV. There have been no changes to the standard benefit provisions since the June 30, 1992 valuation.

SECTION II - EMPLOYEE DATA

Active Employees

The pertinent information for active employees as of June 30, 1993, can be summarized as follows:

	<u>State Employees</u>		<u>Teachers</u>	
	<u>June 30, 1993</u>	<u>June 30, 1992</u>	<u>June 30, 1993</u>	<u>June 30, 1992</u>
Number of Covered Employees	14,582	14,513	11,588	11,594
Average Annual Salary	\$29,800	\$28,200	\$40,000	\$38,700
Average Age (years)	44.0	43.8	44.2	43.6
Average Service (years)	11.1	11.0	14.8	14.9
Number of Vested Employees	7,372	7,236	7,335	7,450
Number of Employees Eligible for Retirement	1,261	1,126	1,053	879

Please note that below we discuss the increase in the average salary level for all employees. In Section I we discussed the increase in the average salary level for employees who were participants on both June 30, 1992 and June 30, 1993. The cost of benefits is directly impacted by the increase to salaries for the group of employees who were employed continuously during the plan year.

The average annual salary for State Employees rose from \$28,200 to \$29,800. This represents an increase of 5.7%, and is up from the 3.3% average increase from June, 1991 to June, 1992. Average age and service for State Employees increased by 0.2 and 0.1 years respectively.

The average annual salary for Teachers rose from \$38,700 to \$40,000 or 3.4%. The difference between this increase and the increase to salaries for Teachers employed continuously during the plan year arises due to the corrected salary information for approximately 2,500 employees and due to new hires earning lower salaries than the Teachers who left employment. The average age for Teachers increased from 43.6 years to 44.2 years. Average years of service stayed approximately the same.

SECTION II - Employee Data (cont'd)

Missing data was estimated by using averages for similar employees with available data. For example, a person missing a date of hire, would be given an estimated date of hire based upon his date of birth compared to other similar employees. For active employees missing salaries, employee contribution balances and prior salary history were used to calculate estimated salaries. For active State Employees there were 28 missing salaries, 11 missing dates of birth, and 37 missing dates of hire. For active Teachers there were approximately 228 missing salaries, 220 missing dates of hire and 255 missing dates of birth. The greater number of missing figures for Teachers can be attributed to the greater difficulty in obtaining their data. However, compared with last year the data process has been greatly improved resulting in the significant decrease in missing data items for this year. In our opinion, in light of the large populations we are dealing with and the reliability of our estimating techniques, the amount of missing data that required estimation does not have a material impact on the results of the valuation.

Tables 1A and 1B provide a distribution of employees by age and service for state employees and teachers, respectively.

Retirees and Beneficiaries

The data provided for analysis of retiree and beneficiary liability included dates of hire and retirement, sex, monthly benefit, type of benefit, and payment option. The more significant statistics for retirees and beneficiaries are summarized as follows:

SECTION II - Employee Data (cont'd)

	<u>State Employees</u>		<u>Teachers</u>	
	<u>June 30, 1993</u>	<u>June 30, 1992</u>	<u>June 30, 1993</u>	<u>June 30, 1992</u>
Pensioners				
Number	7,860	7,875	4,706	4,657
Average Age	70.9	70.5	70.0	69.3
Average Monthly Benefit	\$917	\$880	\$1,815	\$1,715
Beneficiaries				
Number	619	582	215	169
Average Age	71.7	71.8	70	68.6
Average Monthly Benefit	\$669	\$650	\$1,097	\$847

Data for pensioners remained relatively stable with a slight growth in the number of pensioners for the Teachers' Plan and a small decrease in number for the State Plan. Average benefits grew slightly reflecting the impact of the Cost of Living Adjustments.

Tables 2A and 2B show distributions for pensions in payment status as of June 30, 1993 by age and pension type. These tables also indicate total monthly pension payments by age, average payments by age, and total monthly payments by type.

Table 1A - Distribution of State Employees in Active Service

Age	Years of Service and Average Annual Earnings									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	5 19,552									5 19,552
20-24	280 22,634	19 22,079								299 22,599
25-29	810 25,796	384 25,665	20 24,401							1,214 25,742
30-34	604 27,498	722 28,271	309 28,178	52 26,692						1,687 27,928
35-39	534 27,478	566 30,250	469 30,835	514 29,293	68 28,268					2,151 29,398
40-44	405 27,897	526 29,930	397 32,277	636 33,928	410 31,950	41 31,485				2,415 31,397
45-49	396 28,321	467 28,998	359 21,877	481 34,097	482 39,204	147 36,608	7 33,311			2,339 32,968
50-54	240 27,216	367 27,817	294 30,519	302 32,319	253 32,551	126 38,996	31 37,999	4 35,221		1,617 30,879
55-59	134 25,573	292 27,658	272 29,570	288 31,065	242 30,056	75 33,765	30 43,912	11 36,468	4 35,552	1,348 29,783
60-64	74 26,862	206 26,693	198 27,935	234 30,240	179 30,711	66 34,314	21 38,491	12 45,335	5 36,583	995 29,539
65-69	25 30,241	72 26,741	90 25,752	91 32,253	48 26,322	23 32,261	14 40,881	3 64,769	7 34,849	373 29,357
70-74	6 17,047	21 18,857	24 24,875	26 30,588	13 21,662	9 26,314	1 34,862	1 22,369	1 28,854	102 24,461
75+	4 20,484	6 11,228	11 8,122	11 22,985	2 22,593		1 88,110	1 33,286	1 37,141	37 18,789
TOTAL	3,517	3,648	2,443	2,635	1,697	487	105	32	18	14,582
Average Pay	\$26,731	\$28,307	\$30,072	\$31,951	\$33,303	\$35,650	\$40,306	\$41,751	\$34,629	\$29,831

Table 1B - Distribution of Teachers in Active Service

Years of Service and Average Annual Earnings

<u>Age</u>	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40+</u>	<u>Total</u>
0-19										0
20-24	72 18,844									72 18,844
25-29	544 25,022	109 31,088								653 26,035
30-34	338 28,587	342 34,086	48 39,196	1 44,099						729 31,887
35-39	505 29,927	397 36,858	267 41,248	217 41,886	11 43,365					1,397 36,025
40-44	459 31,530	499 38,806	212 42,127	791 41,851	977 43,858	11 44,767				2,949 40,427
45-49	288 34,599	370 40,281	160 43,446	291 43,786	1,466 44,496	563 45,143	3 43,786			3,141 43,090
50-54	129 36,718	182 39,892	94 42,966	171 43,959	345 44,250	499 45,614	138 46,849	3 44,209		1,561 43,675
55-59	38 36,528	66 43,187	40 43,342	86 44,196	156 45,096	114 46,308	82 49,126	22 45,161	14 44,197	618 44,878
60-64	17 35,520	25 42,751	25 45,359	40 43,258	91 44,759	47 45,341	28 45,736	17 51,200	10 43,624	300 44,427
65-69	3 42,521	4 41,259	9 44,737	21 43,818	40 44,049	32 44,681	9 45,146	9 45,767	16 44,954	143 44,368
70-74		1 42,950		4 48,818	5 41,136	3 53,447	3 49,351	3 51,187	3 46,915	22 47,573
75+	1 3,158	1 40,061			1 43,683					3 28,967
TOTAL	2,394 \$29,674	1,996 \$37,763	855 \$42,206	1,622 \$42,628	3,092 \$44,289	1,269 \$45,443	263 \$47,379	54 \$47,045	43 \$44,408	11,588 \$39,969

Table 2A - Distribution of Pensioners - State Employees

Number of Pensioners and Total Monthly Pensions Paid by Age

Age	Service Retirements	Pension Type					Total by Age	Percent of Pensioners/ Average Pension
		Beneficiaries	Legislator's Pension	Accidental Disabilities	Ordinary Disabilities			
< 30	0	2	0	4	0	6		0.07%
	\$	\$ 1,457	\$	\$ 5,717	\$	\$ 7,174		\$ 1,195.67
30-39	0	6	0	7	7	20		0.24%
	0	4,266	0	9,905	2,934	17,105		855.25
40-49	51	25	7	17	51	151		1.78%
	94,110	13,169	7,000	16,123	24,468	154,870		1,025.63
50-54	146	17	4	5	35	207		2.44%
	336,474	14,606	3,813	3,122	17,578	375,593		1,814.46
55-59	296	37	17	13	55	418		4.93%
	723,030	30,690	14,423	11,179	29,373	808,695		1,934.68
60-64	787	53	35	18	83	976		11.51%
	1,072,700	40,503	30,305	15,974	39,815	1,199,297		1,228.79
65-69	1,635	89	33	26	87	1,870		22.05%
	1,571,399	55,952	31,794	19,602	34,066	1,712,813		915.94
70-74	1,670	112	29	18	72	1,901		22.42%
	1,294,479	78,691	28,992	10,330	31,237	1,443,729		759.46
75-79	1,285	120	31	7	58	1,501		17.70%
	891,425	71,462	30,058	3,445	20,893	1,017,283		677.74
80-84	758	74	12	9	26	879		10.37%
	484,129	51,997	11,365	6,415	7,610	561,516		638.81
85-89	326	60	7	2	3	398		4.69%
	187,781	34,329	6,800	1,541	864	231,315		581.19
90-94	102	23	3	0	0	128		1.51%
	64,854	16,052	2,709	0	0	83,615		653.24
95-99	19	1	0	0	0	20		0.24%
	8,123	918	0	0	0	9,041		452.05
100+	4	0	0	0	0	4		0.05%
	2,770	0	0	0	0	2,770		692.50
Total	7,079	619	178	126	477	8,479		\$ 899.26
	\$ 6,731,274	\$ 414,092	\$ 167,259	\$ 103,353	\$ 208,838	\$ 7,624,816		\$

Table 2B - Distribution of Pensioners - Teachers
Number of Pensioners and Total Monthly Pensions Paid by Age

<u>Age</u>	<u>Pension Type</u>					<u>Total by Age</u>	<u>Percent of Pensioners/ Average Pension</u>
	<u>Service Retirements</u>	<u>Beneficiaries</u>	<u>Accidental Disabilities</u>	<u>Ordinary Disabilities</u>			
< 30	0	3	0	0	3		0.06%
	\$	\$	\$	\$	\$		\$
30-39	0	3	0	0	3		0.06%
	0	1,748	0	0	1,748		582.67
40-49	50	17	4	17	88		1.79%
	112,133	20,266	7,314	15,977	155,690		1,769.20
50-54	274	9	5	14	302		6.14%
	748,135	12,521	8,434	13,469	782,559		2,591.26
55-59	518	16	3	24	561		11.40%
	1,520,029	17,193	6,117	29,574	1,572,913		2,803.77
60-64	712	20	6	22	760		15.44%
	1,641,937	25,452	9,340	22,852	1,699,581		2,236.29
65-69	792	32	5	25	854		17.35%
	1,452,169	42,725	6,850	22,530	1,524,274		1,784.86
70-74	655	29	2	16	702		14.27%
	951,403	34,625	2,915	12,298	1,001,241		1,426.27
75-79	564	27	3	11	605		12.29%
	733,444	28,575	3,987	9,024	775,030		1,281.04
80-84	489	27	0	4	520		10.57%
	629,767	28,894	0	2,974	661,635		1,272.38
85-89	353	21	0	3	377		7.66%
	421,679	14,477	0	2,804	438,960		1,164.35
90-94	104	9	0	1	114		2.32%
	118,395	5,538	0	652	124,585		1,092.85
95-99	25	2	0	0	27		0.55%
	28,946	1,100	0	0	30,046		1,112.81
100+	5	0	0	0	5		0.10%
	6,692	0	0	0	6,692		1,338.40
Total	4,541	215	28	137	4,921		\$ 1,783.70
	\$ 8,364,729	\$ 235,772	\$ 44,957	\$ 132,154	\$ 8,777,612		\$

SECTION III - PLAN ASSETS

Market Value of Assets

The Employees' Retirement Fund receives all member and employer contributions. The assets are invested by the State Investment Commission, with the income being added to the Fund and available for reinvestment. Payments from the Fund are primarily for refunds of employee contributions, lump sum death benefits, pension payments, and administrative expenses. Contribution refunds occur when an employee terminates employment before completing ten years of service and elects to take a refund, or when he dies after retirement without having received payments from the Fund equal to his total contributions.

Table 4 shows a summary of income and expenditures for the years ended June 30, 1993 and 1992. Due to a greater than assumed return on assets, for the plan year ending June 30, 1993, the Employees' Retirement Fund showed a net income of \$154,543,485.

The total market value of assets as of June 30, 1993 was \$2,811,948,047. This is divided among the plans as follows (pro-rata based on the Book Value of assets as supplied by the State of Rhode Island Treasurer's Office).

State Employees	\$ 1,187,407,910	42.2%
Teachers	1,539,966,825	54.8%
Teachers' Survivors	<u>84,573,312</u>	<u>3.0%</u>
Total	\$ 2,811,948,047	100.0%

Table 5 shows the composition of the investments of the fund.

Table 6 shows the allocation of reserves to the State Employees Plan, Teachers Plan, and Teacher's Survivors Plan as of June 30, 1993 and 1992. The reserve allocations are based on the book value of assets.

SECTION III - Plan Assets (cont'd)

Actuarial Value of Assets

As of the June 30, 1991 valuation, a new method to calculate the actuarial value of assets was employed. The new method allows for a three year spread of gains and losses in the Market Value. Table 3 shows the development of the actuarial value of assets. The actuarial value of assets returned approximately 11% compared with an 8% assumed return. The actuarial asset value gain of 3% comprises one third of the 1992-93 asset gain or 1% plus one third of the 1991-92 asset gain or 2%. The total Actuarial Value of Assets at June 30, 1993, was \$2,726,033,873 and is divided among the plans based on a prorata share of the market value of assets as follows:

State Employees	\$ 1,151,128,730	42.2%
Teachers	1,492,915,822	54.8%
Teachers' Survivors	<u>81,989,321</u>	<u>3.0%</u>
Total	\$ 2,726,033,873	100.0%

Table 3 - Calculation of Actuarial Asset Value at June 30, 1993

1.	Actuarial Asset Value at June 30, 1992 (equal to market)	\$	2,483,738,322
2.	Contributions		
	(a) Employees		73,940,463
	(b) State		65,277,609
	(c) Municipal		44,041,493
	(d) Miscellaneous		<u>713,449</u>
	(e) Total	\$	183,973,014
3.	Benefit Payments and Other Disbursements		
	(a) Pension Benefit	\$	167,686,235
	(b) Cost of Living Adjustments		27,455,591
	(c) Death Benefits		2,887,220
	(d) Refund of Contributions and other payments		3,902,970
	(e) Medical Premiums and other Miscellaneous expenses		<u>1,992,888</u>
	(f) Total	\$	203,924,904
4.	Assumed Return at 8.00%		
	(a) On Assets	\$	198,699,066
	(b) On Contributions (assume midyear)		7,358,921
	(c) On Benefit Payments		<u>(8,156,996)</u>
	(d) Total	\$	197,900,991
5.	Tentative Actuarial Asset Value on June 30, 1993 [1. + 2.(e) - 3.(e) + 4.(d)]		2,661,687,423
6.	Market Value on June 30, 1993		2,811,948,047
7.	Excess of Market over Tentative Actuarial Asset Value		150,260,624
8.	Prior year adjustments not recognized		
	1992 \$42,778,725 x 2		
	1991 0 x 1		85,557,450
9.	Current Year Experience 7. - 8.		64,703,174
10.	Current Year Adjustment to be recognized (1/3 of Experience)		21,567,725
11.	Cumulative Adjustment		
	1993 21,567,725		
	1992 42,778,725		
	1991 0		64,346,450
12.	Actuarial Asset Value on June 30, 1993 5. + 11.	\$	2,726,033,873

Table 4 - Summary Statement of Income and Expenses

	1993	1992
Employer contributions	\$ 110,032,552	\$ 69,491,591
Member contributions	<u>73,940,463</u>	<u>68,546,610</u>
Total contributions	\$ 183,973,015	\$ 138,038,201
Investment income:		
Dividends	\$ 36,604,988	\$ 29,898,970
Interest	86,198,288	90,238,234
Capital gains (and losses)	57,781,462	150,068,320
Other	119,000	14,500
Expenses	<u>(6,203,338)</u>	<u>(6,985,357)</u>
Net investment income	<u>174,500,400</u>	<u>263,234,667</u>
Total income available for benefit payments	\$ 358,473,415	\$ 401,272,868
Benefit payments:		
Pension benefits	\$ 195,141,826	\$ 187,506,237
Death benefits	2,887,220	2,597,835
Contribution refunds and other payments	<u>5,895,858</u>	<u>6,614,199</u>
Total benefit payments	<u>203,924,904</u>	<u>196,718,271</u>
Excess of income over expenses	<u>\$ 154,548,511</u>	<u>\$ 204,554,596</u>

Note: Detail figures may not add to totals shown because of rounding.

Table 5 - Composition of Assets as of June 30, 1993

	<u>Market Value</u>	<u>Percent of Holdings</u>
Cash/Short Term Investments Short Term Investment Fund Money Market Instruments	\$ 288,963,297	10.2%
Equities - Domestic	1,166,906,689	41.5%
Equities - International	97,138,927	3.5%
Fixed Income - Government	915,091,893	32.5%
Fixed Income - Corporate	123,158,538	4.4%
Fixed Income - In State	27,266,528	1.0%
Real Estate	88,578,590	3.2%
Venture Capital	<u>104,843,585</u>	<u>3.7%</u>
Total Fund Investments	\$ 2,811,948,047	100.0%

Table 6 - Allocation of Book Value Assets by Plan - Reserve Values

	1993	1992
State Employees:		
Employer reserves	\$ 746,948,542	\$ 716,504,362
Member reserves	<u>232,564,339</u>	<u>208,611,783</u>
Total State Employees reserves	\$ 979,512,881	\$ 925,116,145
Teachers:		
Employer reserves	\$ 938,869,036	\$ 875,761,020
Member reserves	<u>331,475,661</u>	<u>299,102,622</u>
Total Teacher reserves	1,270,344,697	1,174,863,642
Teachers Survivors:		
Employer reserves	\$ 59,068,371	\$ 54,870,562
Member reserves	<u>10,697,584</u>	<u>10,226,071</u>
Total Teachers Survivors reserves	69,765,955	65,096,633
Unallocated:		
Unclaimed benefit reserve	<u>233,076</u>	<u>231,679</u>
Total Book Value of Assets	\$ 2,319,856,609	\$ 2,165,308,100

Note: Detail figures may not add to totals shown because of rounding.

SECTION IV - RESULTS OF THE VALUATION

The funding statute calls for the contribution requirement to be calculated as the normal cost of the plan plus the total of the amortization payment for each unfunded cost element. The table below shows the development of the contribution requirement for the State Employees' Plan and the Teachers' Plan.

	<u>State Employees' Plan</u>	<u>Teachers' Plan</u>
Normal Cost	12.21%	14.78%
Less Employee Contributions	<u>7.75%</u>	<u>8.50%</u>
Employer Normal Cost	4.46%	6.28%
Unfunded Cost due to:		
Original Unfunded	6.30%	9.44%
1989 Assumption Changes	(0.64%)	0.00%*
1989 Early Retirement Incentive	0.62%	None
1990 Early Retirement Incentive	0.60%	1.70%
1991 Assumption and Method Changes	(1.50%)	(2.27%)
Fiscal 1990-91 Deferral	0.33%	0.29%
Fiscal 1991-92 Deferral	<u>0.28%</u>	<u>0.27%</u>
Total Unfunded	5.99%	9.43%
Total Cost as a percentage of payroll	10.45%	15.71%

- * The effect of the 1989 assumption changes in the Teachers Plan was less than the minimum threshold for setting up a separate base. Thus, the effect was aggregated with the existing unfunded. See Exhibit III for a description of the amortization method.

The contributions are assumed to be made on a monthly basis. The amounts of the unfunded liabilities in respect of each of the above cost elements together with the remaining amortization period are shown in detail in Exhibit I, parts A3 and B3.

The Teachers' Plan cost is paid 60% by the cities and towns and 40% by the State. However the State will pay the total cost of 0.56% for the contribution deferrals. This results in a contribution requirement for cities and towns of 9.09% and a contribution requirement for the State of 6.62%.

As described in Section I, certain towns elected not to participate in the 1990 early retirement incentive program. The contribution requirement for these towns is 8.07% and for the State is 5.94%.

SECTION IV - Results of the Valuation (cont'd)

The State Employee's Plan fiscal 1996 contribution requirement of 10.45% compares to the fiscal 1995 contribution requirement of 11.32%. The decrease in the contribution requirement is discussed in Section I and a complete development of the fiscal 1996 contribution is shown in Exhibit I, parts A1, A2 and A3.

The Teachers' Plan fiscal 1996 contribution requirement of 15.71% compares to the fiscal 1995 contribution requirement of 16.02%. The decrease in the contribution requirement is discussed in Section I and a complete development of the contribution for Teachers for fiscal 1996 is shown in Exhibit I, parts B1, B2 and B3.

Teacher Survivors Plan

We are in the process of preparing a separate valuation of the liabilities of the Teacher Survivors Plan. The purpose of the review is to assess whether the current assets (\$84.6 million), together with future contributions and investment income will be sufficient to meet future benefit payments.

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND

CERTIFICATE OF ACTUARIAL VALUATION

This is to certify that we have prepared an actuarial valuation of the plan as of June 30, 1993.

This certificate contains the following attached exhibits:

Exhibit I - Actuarial Cost Development of Fiscal Year 1995-96 Contribution Percentage

A. State Employees


B. Teachers

EXHIBIT II - Pension Benefit Obligation, Vested Benefit Liability

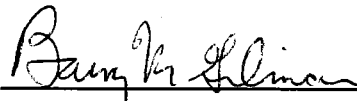
EXHIBIT III - Actuarial Method and Assumptions

EXHIBIT IV - Summary of Plan Provisions

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate and in our opinion each individual assumption used (a) is reasonably related to the experience of the plan and to reasonable expectations and (b) represents our best estimate of anticipated experience under the plan.



Malcolm C. Hodge, F.F.A., A.S.A.
Associate



Barry M. Gilman, F.S.A., M.A.A.A.
Principal

EXHIBIT I - DEVELOPMENT OF CONTRIBUTION PERCENTAGES

A1. State Employees - Development of Normal Cost

The valuation was made with respect to the following data supplied to us by the Retirement Board:

- 14,582 active participants (including 7,372 fully vested)
- 2,279 inactive participants
- 8,479 pensioners (including 619 beneficiaries of deceased pensioners and active employees)

The actuarial factors as of the valuation date are as follows:

1. Actuarial present value of benefits	
(a) Active employees	\$ 1,137,927,000
(b) Inactive employees	32,644,000
(c) Retirees and beneficiaries	887,297,000
(d) Total	\$ 2,057,868,000
2. Actuarial value of assets	1,151,128,700
3. Frozen Initial Liability (unfunded liability)	434,225,700
4. Present value of future employee contributions	299,424,000
5. Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	173,089,600
6. Actuarial present value of future compensation	3,863,536,000
7. Covered Payroll - Employees under Retirement Age	425,743,000
8. Employer Normal Cost, (5. x 7. + 6.)	\$ 19,073,600

EXHIBIT I - Development of Contribution Percentages (cont'd)

A2. State Employees - Development of Employer Cost

1.	Total Covered Payroll for fiscal 1994	\$	444,572,000
2.	Employer Normal Cost		19,073,600
3.	Amortization of Frozen Initial Liability		27,934,900
4.	Projected 1995-96 Covered Payroll		485,483,700
5.	1995-96 Employer Normal Cost $((2. \div 1.) \times 4.)$		20,828,800
6.	Total annual cost if paid on July 1, 1995 (3. + 5.)		48,763,700
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	\$	50,714,200
8.	a. Employer Normal Cost percentage		4.46%
	b. Employer Unfunded Cost percentage		5.99%
	c. Employer fiscal 1996 Cost $(7. \div 4.)$		10.45%

EXHIBIT I - Development of Contribution Percentages (cont'd)

A3. State Employees - Determination of Frozen Initial Liability

	<u>Base</u>	<u>Amortization Period</u>	<u>Payment</u>
1. Bases at July 1, 1991			
(a) Original	\$ 453,587,400	24	\$ 26,901,800
(b) 1989 Base	(50,535,100)	28	(2,718,600)
(c) 1989 Early Retirement Window	50,325,900	29	2,650,700
(d) New 1991 Bases	(74,440,900)	30	(3,843,000)
(e) 1990-91 Deferral	23,409,900	24	1,388,400
(f) 1991-92 Deferral	20,264,600	24	1,201,900
(g) Total	\$ 422,611,800		\$ 25,581,200
2. Bases at July 1, 1992			
(a) Original	\$ 460,820,400	23	\$ 28,112,200
(b) 1989 Base	(51,641,800)	27	(2,841,000)
(c) 1989 Early Retirement Window	51,489,200	28	2,770,000
(d) New 1991 Bases	(76,245,700)	29	(4,015,900)
(e) 1990/91 Deferral	23,783,200	23	1,450,900
(f) 1991/92 Deferral	20,587,700	23	1,255,900
(g) Total	\$ 428,793,000		\$ 26,732,100
3. Bases at July 1, 1993			
(a) Original	\$ 467,324,900	22	\$ 29,377,000
(b) 1989 Base	(52,704,900)	26	(2,968,800)
(c) 1989 Early Retirement Window	52,616,700	27	2,894,600
(d) New 1991 Bases			
- Assumption and Method changes	(130,014,300)	28	(6,994,400)
- 1990 Early Retirement Window	52,006,100	28	2,797,800
(e) 1990/91 Deferral	24,118,900	22	1,516,200
(f) 1991/92 Deferral	20,878,300	22	1,312,500
(g) Total	\$ 434,225,700		\$ 27,934,900

- Notes: (1) Following the funding method, if the change in unfunded liability is greater than 10% of the existing amount of unfunded liability, the change in unfunded liability is separately amortized over a 30-year period.
- (2) The contribution deferral amounts are being separately amortized over the remaining amortization period of 24 years. This is an exception to the normal funding method where the contribution deferral amounts would be added to the other 1991 bases and then amortized together.

EXHIBIT I - Development of Contribution Percentages (cont'd)

B1. Teachers - Development of Normal Cost

The valuation was made with respect to the following data supplied to us by the Retirement Board:

- 11,588 active participants (including 7,335 fully vested)
- 1,156 inactive participants
- 4,921 pensioners (including 215 beneficiaries of deceased pensioners and active employees)

The actuarial factors as of the valuation date are as follows:

1. Actuarial present value of benefits	
(a) Active employees	\$ 1,835,623,000
(b) Inactive employees	34,357,000
(c) Retirees and beneficiaries	1,040,002,000
(d) Total	\$ 2,909,982,000
2. Actuarial value of assets	1,492,915,800
3. Frozen Initial Liability (unfunded liability)	745,698,400
4. Present value of future employee contributions	386,659,700
5. Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	284,708,100
6. Actuarial present value of future compensation	4,548,398,000
7. Covered Payroll - Employees under Retirement Age	456,863,000
8. Normal Cost, (5. x 7. ÷ 6.)	\$ 28,597,500

EXHIBIT I - Development of Contribution Percentages (cont'd)

B2. Teachers - Development of Employer Cost

1.	Total Covered payroll for fiscal 1994	\$	473,295,000
2.	Employer Normal Cost		28,597,500
3.	Amortization of Frozen Initial Liability		46,876,100
4.	Projected 1995-96 Covered Payroll		516,850,000
5.	1995-96 Employer Normal Cost ((2. + 1.) x 4.)		31,229,200
6.	Total annual cost if paid on July 1, 1995 (3. + 5.)		78,105,300
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	\$	81,229,500
8.	a. Employer Normal Cost percentage		6.28%
	b. Employer Unfunded Cost percentage		9.43%
	c. Employer fiscal 1996 Cost (7. + 4.)		15.71%

EXHIBIT I - Development of Contribution Percentages (cont'd)

B3. Teachers - Determination of Frozen Initial Liability

	<u>Base</u>	<u>Amortization Period</u>	<u>Payment</u>
1. Bases at July 1, 1991			
(a) Original	\$ 724,324,800	24	\$ 42,958,900
(b) New 1991 Bases	(43,847,500)	24	(2,600,500)
(c) 1990/91 Deferral	22,297,000	24	1,322,400
(d) 1991/92 Deferral	21,003,500	24	1,245,700
(e) Total	\$ 723,777,800		\$ 42,926,500
2. Bases at July 1, 1992			
(a) Original	\$ 735,875,200	23	\$ 44,891,800
(b) New 1991 Bases	(44,546,800)	23	(2,717,600)
(c) 1990/91 Deferral	22,652,600	23	1,381,900
(d) 1991/92 Deferral	21,338,400	23	1,301,700
(e) Total	\$ 735,319,400		\$ 44,857,800
3. Bases at July 1, 1993			
(a) Original	\$ 746,262,100	22	\$ 46,911,600
(b) New 1991 Bases			
- Assumption and Method changes	(179,171,400)	22	(11,263,100)
- 1990 Early Retirement Window	133,995,700	22	8,423,200
(c) 1990/91 Deferral	22,972,400	22	1,444,100
(d) 1991/92 Deferral	21,639,600	22	1,360,300
(e) Total	745,698,400		46,876,100

Notes: (1) If the change in the unfunded liability is less than 10% of the existing unfunded liability, the change in the unfunded liability is amortized over the remaining amortization period of the original unfunded liability.

(2) The contribution deferral amounts are being separately amortized over the remaining amortization period of 24 years. This is an exception to the normal funding method where the contribution deferral amounts would be added to the other 1991 bases and then amortized together with the original unfunded.

EXHIBIT II - PENSION BENEFIT OBLIGATION, VESTED BENEFIT LIABILITY

Pension Benefit Obligation

The value of the pension benefit obligation required for disclosure by Statement No. 5 of the Governmental Accounting Standards Board is shown below as of June 30, 1993.

	<u>Pension Benefit Obligation</u>	
	<u>State</u>	
	<u>Employees</u>	<u>Teachers</u>
Participants currently receiving benefits and terminated employees not yet receiving benefits	\$ 919,941,000	\$ 1,074,359,000
Current employees		
Accumulated employee contributions	232,564,300	331,475,700
Employer-financed vested	268,681,700	535,617,500
Employer-financed nonvested	<u>165,353,000</u>	<u>273,367,000</u>
Total pension benefit obligation	\$ 1,586,540,000	\$ 2,214,819,200
Assets at Market Value	\$ <u>1,187,407,900</u>	\$ <u>1,539,966,800</u>
Unfunded Liability	\$ 399,132,100	\$ 674,852,400
Funded Level	74.84%	69.53%

EXHIBIT II - Pension Benefit Obligation, Vested Benefit Liability (cont'd)

Vested Benefit Liability

The value of vested benefits represents the current value of all benefits accrued by present and former employees which are not conditional on the future employment of the employee for payment. The benefits valued include benefits payable to current retirees and beneficiaries, deferred pensions and benefits accrued by active participants with at least ten years of service. For active employees with less than ten years of service, only the accumulated employee contributions are included.

The value of vested benefits as of June 30, 1993 is as follows:

	<u>Vested Benefit Liability</u>	
	<u>State</u>	
	<u>Employees</u>	<u>Teachers</u>
Active participants	\$ 501,246,000	\$ 867,093,200
Inactive participants	32,644,000	34,357,000
Retired members	<u>887,297,000</u>	<u>1,040,002,000</u>
Total Value of Vested Benefits	\$ 1,421,187,000	\$ 1,941,452,200
Assets at Market Value	\$ <u>1,187,407,900</u>	\$ <u>1,539,966,800</u>
Unfunded Liability	\$ 233,779,100	\$ 401,485,400
Vested Benefits Funding Level	83.55%	79.32%

EXHIBIT III - ACTUARIAL METHOD AND ASSUMPTIONS

a. Actuarial Funding Method

Actuarial Funding Method - Frozen initial liability method. This method is alternatively referred to as the entry age normal cost method with frozen initial liability.

Entry Age - The employee's age at the time he or she would have commenced participation if the plan had always been in existence.

Frozen actuarial liability - At the time this funding method was introduced June 30, 1985 the unfunded liability was calculated and called the Frozen Actuarial Liability. This amount was originally to be funded over a 30 year period by the sum-of-the-digits amortization method. Effective from 1989, however the outstanding balance, referred to as the Unfunded Liability, is to be amortized over the remaining amortization period using a level percent of salary funding. (ref. General Laws section 36-10-2 and 36-10-2.1). Subsequent changes to the Unfunded Liability due to changes to benefits or actuarial assumptions are amortized either over a new 30-year period or over the remaining initial amortization period depending on how large the total change to the unfunded liability for each fiscal year is relative to the existing unfunded liability. The following table illustrates the amortization method:

<u>Change in Unfunded Liability</u>	<u>Amortization Period</u>
Less than 1% of existing Unfunded	No new base set up (existing Unfunded not changed)
Between 1% and 10% of existing Unfunded	The change to Unfunded is amortized over current remaining period i.e., aggregated with existing Unfunded
Over 10% of existing Unfunded	A separate base equal to change in Unfunded is set up and amortized over a new 30 year period

EXHIBIT III - Actuarial Method and Assumptions (cont'd)

b. Actuarial Assumptions Concerning Future Events

Mortality - 1971 Group Annuity Mortality Table with Mortality for disabled persons set equal to the age 65 mortality under 1971 Group Annuity Mortality Table.

<u>Age</u>	<u>Sample Rates</u>		<u>Expected Life</u>	
	<u>Mortality</u>	<u>Mortality</u>	<u>Males</u>	<u>Females</u>
	<u>Males</u>	<u>Females</u>		
20	.050%	.026%	55.3 yrs.	61.6 yrs.
25	.062	.035	50.4	56.7
30	.080	.047	45.6	51.8
35	.112	.065	40.8	47.0
40	.163	.094	36.1	42.1
45	.292	.140	31.4	37.4
50	.529	.215	26.9	32.6
55	.852	.326	22.8	28.0
60	1.312	.549	18.8	23.5
65	2.126	.956	15.2	19.3
70	3.611	1.648	11.9	15.3

Investment Return - 8.0%, compounded annually.

Salary Increases - Salaried will increase at a rate of 4.5%, compounded annually.

Retirement Age - State employees are assumed to retire at the later of age 62-1/2 or completion of the service requirements. Teachers are assumed to retire at the later of age 61 or completion of the service requirements.

Disability - Disability is assumed to occur in accordance with the following table with 15% of disabilities being occupational.

<u>Disability - Sample Rates</u>	
<u>Age</u>	<u>Rate of Disability</u>
20	.06%
25	.09
30	.11
35	.15
40	.22
45	.36
50	.61
55	1.01
60	--

EXHIBIT III - Actuarial Method and Assumptions (cont'd)

Withdrawal - Termination of service for reasons other than death, retirement, or disability will be in accordance with the following tables.

Sample Withdrawal Rates

<u>Age</u>	<u>State Employees</u>	<u>Teachers</u>
20	21.20%	12.39%
25	15.80%	9.70%
30	11.60%	7.50%
35	8.40%	5.66%
40	6.20%	4.14%
45	4.20%	2.75%
50	2.60%	1.35%
55	--	--
60	--	--

Cost of Living Adjustments - 3% compound annually beginning on the January 1st following a participant's third anniversary of retirement.

Actuarial Value of Assets - The actuarial value of assets was set equal to the market value of assets as of June 30, 1991 as reported to Mercer by the Treasury Department in December 1991. Investment gains and losses relative to the expected return on assets from this date onward will be recognized over a 3-year smoothing period.

Estimation of Unknown Employee Characteristics - Missing dates for participants are estimated using a band-type averaging method assigning band grouped average dates to those individuals with missing dates of birth or hire. For example, an employee missing a date of hire is given an estimated date of hire based on the average of known dates of hire for persons in his age band. For Employees who are missing salaries, salaries are estimated based on employee contributions for the year ending June 30, 1993 and with regard to employee salary history, where this information was insufficient, average salaries were used. For State Employees this is \$29,800, and for Teachers it is \$40,000 for the salary year July 1, 1992 to June 30, 1993.

EXHIBIT IV - SUMMARY OF PLAN PROVISIONS

PLAN NAME	Employees' Retirement System of the State of Rhode Island
FINAL AVERAGE SALARY	Final average salary is the three highest consecutive years of earned salary exclusive of overtime, bonuses, or severance pay.

NORMAL RETIREMENT

Age and Service Requirements

General Employees and Teachers may retire with full accrued benefits at age 60 with 10 years of service or after 28 years of service regardless of age.

Correctional Officers may retire with unreduced accrued benefits at age 50 with 20 years of service.

Legislators may retire with unreduced accrued benefits at age 55 with 8 years of service or after 20 years of service with no restriction on age.

Amount of Retirement Benefits

For State Employees and Teachers:

1.7% of final average salary times service up to 10 years, plus

1.9% of final average salary times service in excess of ten years through 20 years, plus

3.0% of final average salary times service in excess of 20 years up to the 34th year of service, plus

2.0% of final average salary for the 35th year.
Maximum benefit is 80% of final average salary.

EXHIBIT IV - Summary of Plan Provisions (cont'd)

For Correctional Officers:

2.0% of final average salary for the first 30 years of service, plus
6.0% of final average salary for the 31st year, plus
5.0% of final average salary for the 32nd year, plus
4.0% of final average salary for the 33rd year, plus
3.0% of final average salary for the 34th year, plus
2.0% of final average salary for the 35th year.
Maximum benefit is 80% of final average salary.

For Legislators:

\$600 per year of service.
Maximum benefit is \$10,000.

DISABILITY BENEFIT

Non-occupational

Service Requirement: 5 years

Amount of Benefit: Regular pension benefit based on service to disability and final average salary at time of disability. The minimum benefit is 17% of final average salary.

Occupational

There is no age or service requirements for the occupational disability benefit.

Amount of Benefit: Two thirds of final salary at time of disability, payable immediately.

VESTING

Employees are vested in their retirement benefits on completion of 10 years of service.

EXHIBIT IV - Summary of Plan Provisions (cont'd)

PRE-RETIREMENT DEATH BENEFITS

Lump Sum Benefit

There are no age or service requirements for this benefit.

Amount of Benefit:

- (a) \$800 per year of service with a minimum of \$4,000 and a maximum of \$16,000, plus
- (b) Refund of employee contributions.

Joint and Survivor Benefit (optional)

Service Requirement: 10 years for General Employees and Correctional officers, 8 years for Legislators.

Amount of Benefit: Benefit employee would have received had he/she retired the day before he/she died and chosen the joint and survivor option.

Occupational Death Benefit

This benefit has no age or service requirement.

Amount of benefit:

- (a) 50% of salary to spouse or children of employees under age 18, less workmen's compensation, plus
 - (b) refund of employee contributions.
-

EXHIBIT IV - Summary of Plan Provisions (cont'd)

POST-RETIREMENT DEATH BENEFITS

Lump sum in the amount of:

- (a) 100% of employee contributions less benefits paid, plus
 - (b) Pre-retirement death benefit, reduced 25% per year of retirement, with a minimum of \$4,000.
-

EMPLOYEE CONTRIBUTIONS

State Employees:	7.75%
Teachers:	8.50%
Legislators:	30.00%

AVAILABLE BENEFIT OPTIONS

Joint and Survivor: Actuarially Equivalent Benefit paying either 100% or 50%, depending on option selected, of retirement benefit to surviving beneficiary.

Social Security: Pays an increased benefit until age 62 and a reduced benefit thereafter to provide a level benefit when Social Security payments are accounted for.

POST-RETIREMENT COST OF LIVING ADJUSTMENT

Retirees' benefits are adjusted annually by 3%, compounded, to allow for increases in cost of living.

Cost of living adjustments begin on the January 1st following the third anniversary of an employee's retirement.

APPENDIX - Model Letter to Cities and Towns Participating in the Teacher's Retirement Plan

The (city) (town) of _____ provides retirement benefits to its public school teachers through its participation in the Rhode Island Retirement System. The system is a statutory, mandatory, state-wide, multiple retirement system, which first covered Rhode Island teachers on July 1, 1949. It is administered by the State Retirement Board, the composition of which is set forth in the pertinent state statute. The assets are held in the custody of the State Treasurer as an undivided single fund.

The actuarial costs of the retirement benefits are partially funded by teacher contributions of 8-1/2 percent of pay effective July 1, 1986. The net employer actuarial costs are determined annually by the actuary and, as provided by statute, are certified by the Retirement Board to the Department of Administration. Contributions are reported as a percent of payroll, payable in part by the State of Rhode Island and in part by the (city) (town). The split between the State and Municipality is specified in the statute. For fiscal year 1995-96, by statute the State will pay 40% and the Municipality will pay 60%.

The actuarial valuation prepared by William M. Mercer, Incorporated uses the entry age normal cost method with the frozen initial liability. The valuation assumes an 8 percent interest return on assets and assumes an annual salary increase of 4.5%. In addition, other actuarial assumptions are made for post-retirement increases and other contingencies as set forth in the published annual reports of the Retirement Board. Following are comparative highlights of the last three years for the Teachers system as a whole:

Actuarial costs and liabilities, as shown in the summary presentation, are determined in the aggregate for the Teachers System. Accordingly, employer contributions are first determined in the aggregate for all participating employers in this multiple employer system and are then expressed as a percentage of the aggregate participating payroll. Each participating City or Town for 1996 fiscal year will apply 60% of this factor to its participating payroll (the remaining forty percent of the employer cost is contributed by the State as well as the full cost of deferred contributions by the State).

Employer contributions by the (city) (town) of _____ for each of the last 2 years (together with the amount for the current year, based on the promulgated rate percent of 9.09%*) are as follows:

	<u>Year Ended June 30,</u>		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Participating payroll			
Employer contributions			

With respect to the Teachers Retirement System, William M. Mercer, Incorporated, independent actuaries advising the Retirement Board, have stated:

"We believe that the funding program set forth in the state statute is a reasonable basis for funding the Rhode Island Teachers Retirement System. If the statutory funding program is followed without change, the System will be fully funded - that is, the assets will equal the actuarial liability on June 30, 2022. In the interim the assets are projected to be sufficient at all times to meet the cash requirements for projected benefit payments."

According to the statutory funding schedule, the combined contributions required each year by the (city) (town) of _____ and the State will remain relatively level as a percent of payroll as the System moves toward funding the full actuarial liability. Ultimately,

however, because the actuarial funding results in the accumulation of reserves that are invested, the required appropriation will be significantly less than would be required if this System were on a pay-as-you-go basis.

- * The promulgated rate percent for certain towns which did not participant in the 1990 early retirement incentive program is 8.07%. These towns are listed below:

Code	2003	Burillville
	2009	East Greenwich
	2018	Little Compton
	2025	North Smithfield